

**Amendments to the Claims:**

The below-listing of claims replaces all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Currently amended) ~~An instrument for intended use in monitoring or controlling a foam associated with a process or an object~~ A system for testing a mineral admixture for making concrete associated with the foam, comprising:

a vessel for receiving the mineral admixture;

a source of an air entraining agent;

a passive sensor for generating an output signal representative of an acoustic emission associated with the foam; and

a controller in communication with the passive sensor for receiving the output signal and providing a response,

wherein the response comprises a second signal for causing the source to add the air entraining agent to the mineral admixture in the vessel.

2.-6. (Cancelled)

7. (Currently amended) The system according to claim [[5]] 1, further including an agitator associated with the vessel, and wherein the response comprises a third signal for activating the agitator.

8 – 16. (Canceled)

17. (Currently amended) A method of testing a mix used to form concrete,

comprising:

adding ~~[[an]]~~ a first amount of an agent to the mix;

detecting one or more acoustic emissions from the mix; and

determining whether an additional amount of the agent is required based on the detected acoustic emissions.

18. (Previously presented) The method according to claim 17, wherein the agent is an air entraining agent and the step of detecting comprises receiving the acoustic emissions from a foam associated with the mix.

19. (Original) The method according to claim 17, wherein the adding and detecting steps are accomplished using only a sample of the mix.

20. (Currently amended) The method according to claim ~~[[17]]~~ 19, further including ~~determining whether to add an additional amount of the agent based on the detected acoustic emissions, and~~ when an appropriate amount of the agent is added to the mix, creating a larger batch of the mix by adding ~~[[an]]~~ a second amount of the agent proportional to the appropriate amount of the agent added to the sample.

21. (Currently amended) ~~An instrument for intended use in monitoring or controlling a foam associated with a process or an object~~ A system for testing a mineral admixture for making concrete associated with the foam, comprising:

a vessel for receiving the mineral admixture;

a source of an air entraining agent;

means for passively measuring an acoustic emission from the foam and

generating an output signal representative of the acoustic emission; and  
means for receiving the output signal and providing a response,  
wherein the response comprises a second signal for causing the source to add  
the air entraining agent to the mineral admixture in the vessel.

22. (Currently amended) The [[instrument]] system of claim 21, wherein the passive measuring means comprises a passive sensor.

23. (Currently amended) The [[instrument]] system of claim 21, wherein the receiving means comprises a controller.